

### **Abstract of the disclosure**

This invention is utilizing the principle of repulsion between oil and water, the differences of surface tension of oil and water, and the character of melting of gelatin materials in high temperature and solidification in cold temperature to produce a biodegradable seamless BB paintball for BB guns. It contains a colored edible oil solution and is safe when it hits the target to produce an obvious mark that is edible. The seamless paintballs so produced are consistent in size and weight. It reduces the possibility of jamming during shooting and loading of BB guns which are common complaints of the conventional BB paintballs. A specially designed double nozzled machine can produce oil-in-water perfectly round and seamless droplets. The oil solution contains the dyes and the water solution contains a specially formulated gelatin. The droplets are then solidified by a chilled cooling oil flow. The oil solution comprises of 1%-5% (W/W) edible dye in edible oil. The water solution comprises of 10%-34% gelatin that can also consist of 1%-10% polyethylene glycol (PEG), 1%-10% starch and 0.1%-1% edible dye in distilled water.